# PCI Express SATA Card

4 port PCI Express SATA Card

PEXSATA24E

**Instruction Manual** 



Actual product may vary from photo



## **FCC Compliance Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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## Introduction

Thank you for purchasing a StarTech.com 4 port PCI-E SATA Card. Now, you'll be able to maximize your computer SATA capability, while using only a single PCI-Express slot. With four internal SATA ports, and two eSATA ports, you'll be able to add the speed and reliability of SATA to your internal storage, with the option of using an eSATA external storage device.

#### Features

- · Provides four independent channels for support of up to four SATA drives
- Supports SATA II (300) drives and is backward compatible with SATA I (150) drives
- · Features SATA II native command queuing (NCQ)
- Compliant with PCI Express Base Specification 1.0a

#### System requirements

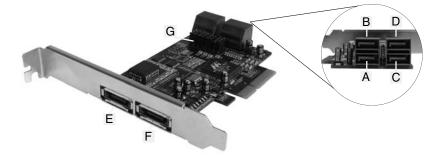
- Floppy Disk Drive (for third party driver installation)
- · A PC with an available PCI Express slot
- CD-ROM drive (driver installation)
- SATA-based drives

#### Package contents

This package should contain:

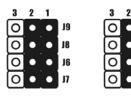
- 1 x Four-channel PCIe/SATA II adapter
- 1x Driver CD
- 1x SATA Cable
- 1x Instruction Manual (this document)

# **Hardware Guide**



Instruction Manual

**Please Note:** There are six SATA ports available on PEXSATA24E, 4 internally and 2 eSATA connectors externally. Based on the images above, the respective ports have been named A through F. Ports A to D are internal SATA ports, while ports E and F are external SATA ports. By changing the jumper setting on PEXSATA24E circuit board, you will be able to utilize four of the ports simultaneously. Please designate which ports you wish to use, by adjusting jumper settings according to the chart below. By default, Port A, B, C and D are working.



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J2

	G (Jumper Settings)			
JP	Description	Active Port		
J2-J5	1-2 close	Enable SATA Connector D		
	2-3 close	Enable SATA Connector E		
J6-J9	1-2 close	Enable SATA Connector C		
	2-3 close	Enable SATA Connector F		

## Installation



**WARNING!** PCI Express cards, like all computer equipment, can be severely damaged by static electricity. Be sure that you are properly grounded before opening your computer case or touching your card. StarTech.com recommends that you wear an anti-static strap when installing any computer component. If an anti-static strap is unavailable, discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds. Also be careful to handle the card by its edges and not the gold connectors.



**Please note:** The following instructions assume that the SATA drives that will be connected to PEXSATA24E have been physically installed within the computer chassis. If this is not the case, and you require instruction on how to install the hard drive in the computer chassis, please consult the documentation that accompanied your purchase of the hard drive/computer.

#### Windows Vista<sup>™</sup> Fresh Installation

Follow the instructions in this section if you are performing a new installation of Windows Vista<sup>™</sup>, and you wish to boot from a drive attached to PEXSATA24E:

- 1. Shut down all power connected to the computer, as well as all devices connected to the computer peripherally (i.e. Printers, Monitors, Scanners etc.). As an added step to ensure safe installation, unplug the power supply from the computer.
- Remove the computer cover, allowing access to the motherboard and available slots. For more detailed instruction on how to perform this step, please refer to the documentation that was included with your computer at the time of purchase.
- Locate an empty PCI Express slot, removing the metal bracket covering the accompanying empty port/socket on the rear panel of the computer chassis.
- 4. Position the card above the open PCI Express slot, ensuring that the card is properly aligned with the slot. Insert the card firmly into the slot, distributing force evenly across the length of the board. Once inserted, secure the card into the adjoining socket (previously covered by metal bracket, on the rear panel of the computer chassis), using the correct size screw (if necessary, please consult documentation that accompanied purchase of computer).
- 5. Attach PEXSATA24E to the Serial ATA drive, using a SATA (data) cable.
- 6. Repeat steps 4 and 5 for each remaining hard drive that will be connected (internally) to PEXSATA24E.
- 7. Replace the computer cover and re-connect all power to the computer.
- 8. Start the computer as you normally would to perform an operating system installation, ensuring that the Windows Vista<sup>™</sup> installation CD/DVD is present in the drive, and the BIOS has been suitably adjusted to boot from the CD/DVD Drive.9. When the Windows Install screen appears, fill in the necessary information and click Next. Follow the operating system instructions until a page appears asking "Where

do you want to install Windows?". From here, click on Load Driver.

- 10. You will then be asked to provide the necessary driver files. The files can be accessed by CD, DVD, or USB Flash Drive. As such, connect the drivers to the computer using one of these methods, and click **Browse** to specify the location of the files. Then, click **Next**.
- 11. Windows Vista™ will then install the necessary files, after which PEXSATA24E will be recognized as a usable drive. Select the drive on which you wish to install the operating system, and click **Next**, to resume normal operating system installation.

#### Windows 2000/XP/2003 Server Fresh Installation

Follow the instructions in this section if you are performing a new installation of Windows 2000/XP/2003, and you wish to boot from a drive attached to PEXSATA24E.

Prior to installation, it is advisable to create a driver diskette. To do so, please locate the following folder, located on the Driver CD:

#### D:\PCIe\4-SATA\Driver\i386 (where D: denotes the CD/DVD-ROM drive location)

Copy all files from this directory onto a blank floppy diskette. Remove the disk from the drive, and label it accordingly.

- 1. Shut down all power connected to the computer, as well as all devices connected to the computer peripherally (i.e. Printers, Monitors, Scanners etc.). As an added step to ensure safe installation, unplug the power supply from the computer.
- Remove the computer cover, allowing access to the motherboard and available slots. For more detailed instruction on how to perform this step, please refer to the documentation that was included with your computer at the time of purchase.
- Locate an empty PCI Express slot, removing the metal bracket covering the accompanying empty port/socket on the rear panel of the computer chassis.
- 4. Position the card above the open PCI Express slot, ensuring that the card is properly aligned with the slot. Insert the card firmly into the slot, distributing force evenly across the length of the board. Once inserted, secure the card into the adjoining socket (previously covered by metal bracket, on the rear panel of the computer chassis), using the correct size screw (if necessary, please consult documentation that accompanied purchase of computer).
- 5. If a floppy drive is available on the host system, attach PEXSATA24E to the Serial ATA drive, using a SATA (data) cable. If no floppy drive is available, please skip to the section entitled Installation Without a Floppy Drive
- 6. Repeat steps 4 and 5 for each remaining hard drive that will be connected (internally) to PEXSATA24E.
- 7. Replace the computer cover and re-connect all power to the computer.
- 8. Turn on the computer. Upon first boot, Windows will instruct you to Press [ F6 ] for third party SCSI or driver installation. As such, please hit F6 to continue.

Press [S] when setup asks if you want to specify an additional device, and insert the boot diskette into your floppy drive, then press [Enter]

#### Select [Marvell Serial ATA Adapter], then press [Enter] .

Press **[Enter]** again to finish driver installation, then follow the on-screen instructions to complete the Windows installation.

**Please note**: If a Security Alert warning pops up, click **Yes**, as this driver has passed Microsoft compatibility testing.

Follow the setup instructions to select your choice for partition and file system. After setup examines your disks, it will copy files from the CD to the hard drive selected above and restart the system. After restart, the setup process will resume installing the new drive(s).

#### Installation Without a Floppy Drive

In the absence of an available floppy drive for driver installation, once PEXSATA24E has been installed within the computer:

- 1. Connect the fresh (blank) drive to the motherboard SATA controller.
- 2. Power on the computer, and boot from the operating system Boot CD, and follow Microsoft's Windows installation procedure to complete the operating system installation.
- Once the operating system has been installed on the drive, install the driver located at: D:\PCIe\4-SATA\Driver\i386 (where D: denotes the CD/DVD-ROM drive location) on the included Driver CD.
- 4. From the Device Manager, verify that the RAID controller has successfully been installed. (For more information, please refer to page 5: Verifying Successful Installation. If the RAID controller does not appear in the Device Manager, please reattempt to install the driver by repeating step 3.
- 5. Once you have established that the driver installation was successful, power down the computer, connect the intended hard disk to PEXSATA24E and power up the computer.

#### Windows 2000/XP/2003 Server/Vista™ Existing Installation

Follow the instructions in this section if you are connecting PEXSATA24E to drives on which Windows 2000/XP/2003 has previously been installed.

- 1. Shut down all power connected to the computer, as well as all devices connected to the computer peripherally (i.e. Printers, Monitors, Scanners etc.). As an added step to ensure safe installation, unplug the power supply from the computer.
- Remove the computer cover, allowing access to the motherboard and available slots. For more detailed instruction on how to perform this step, please refer to the documentation that was included with your computer at the time of purchase.
- Locate an empty PCI Express slot, removing the metal bracket covering the accompanying empty port/socket on the rear panel of the computer chassis.

- 4. Position the card above the open PCI Express slot, ensuring that the card is properly aligned with the slot. Insert the card firmly into the slot, distributing force evenly across the length of the board. Once inserted, secure the card into the adjoining socket (previously covered by metal bracket, on the rear panel of the computer chassis), using the correct size screw (if necessary, please consult documentation that accompanied purchase of computer).
- 5. Attach PEXSATA24E to the Serial ATA drive, using a SATA (data) cable.
- 6. Repeat steps 4 and 5 for each remaining hard drive that will be connected (internally) to PEXSATA24E.
- 7. Replace the computer cover and re-connect all power to the computer.
- Power on the computer. Once Windows boots up, the Found New Hardware Wizard will appear. If the connected drive(s) are running Windows XP (SP1 or earlier) or Server 2003 (SP1 or later), select No, not this time. Click Next.
- 9. Insert the Driver CD, and select Install the software automatically (recommended), then click Next.
- 10. If the **Hardware Installation** window pops up, click **Continue Anyway**, then **Finish**. Please note that this driver has been thoroughly tested for stability and compatibility.
- 11. Click Finish.

#### **Verifying Successful Installation**

To verify the successful installation of PEXSATA24E:

- 1. Right-click on My Computer and select Manage.
- 2. Select Device Manager.
- 3. Double-click on SCSI and RAID Controller, then double-click Marvell Serial ATA Gen 2 PCI Express Adapter to display driver properties. A message should be displayed in the dialog box, indicating that the driver has correctly been installed.

## **Specifications**

Connectors	4x Internal SATA Connectors 2x External eSATA Connectors	
Cables	1FT sata data cable (female connectors)	
Chipset	Marvell 88SX7042	
OS Support	Windows ME/2000/XP/Vista™	

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